

CONSTRUCTION VALUE ENGINEERING CONCEPT PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION

Date 05/14/2008

Contract ID 080328-501

Job No. J5 P0592 A

County Camden

Route 5

Original Bid Cost \$11,378,348.02

Contractor Dave Kolb Grading

By Jeff Kolb

Designed By Jeff Kolb

Phone (636) 441-0200

VE 08-35

1. Description of existing requirements and proposed change(s). Advantages/Disadvantages

a) The existing conditions call out item 220 placing 8" rock base. Our proposed changes would call for the rock base to be increased to 12".

Advantage: By going with 12", it will give a longer life and less maintenance.

b) See attachment A

2. Estimate of reduction in construction costs.

\$433,536.00

3. Prediction of any effects the proposed change(s) will have on other department costs, such as maintenance and operations.

See (a) above

4. Anticipated date for submittal of detailed change(s) of items required by Section 104.6 of the Specifications.

05/14/2008

(date)

5. Deadline for issuing a change order to obtain maximum cost reduction, noting the effect of contract completion time or delivery schedule.

05/30/2008

(date)

Same completion date. Please notify by 05/30 to build new grading file.

(effect)

6. Dates of any previous or concurrent submission of the same proposal.

04/14/2008

(date and/or dates)

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ATTACHMENT A

B) Detailed estimate of the cost of performing the work under the existing contract and under the proposed change:

We would propose 12" rock base in lieu of 8" rock base.

We believe it would save roughly \$1,000,000.00 in future paving cost. (base rock, paving). The added cost is \$566,464.00 as described below for a net savings of \$433,536.00.

File Prep	\$ 22,000.00
Profile change sta. 1213 = 1230	\$ 7,500.00
Add Class C. sta. 1218 = 1227 = 28,218 @ \$7.12	\$200,912.60
Add Class A. longer haul 28,218 @ \$3.00	\$ 84,654.00
Add 4" rock base 256,529sy 1/3 @ \$0.98	<u>\$251,398.42</u>
Added Cost	<u>\$566,464.00</u>

TOTAL VALUE ENGINEERING

\$433,536.00

We would propose lowering profile through stations 1213 = 1230 to generate additional Class C. This appears to be the deepest cut and would be the best rock.

We didn't go into as much detail as the first value engineering because we just wanted to see if this had merit. Either the state or Dave Kolb Grading can have API change profile to generate the Additional 28,218 c.y. needed for 12" base.

D) Any itemized list of the contract items of work affected by the proposed changes, including any quantity variation attributable thereto.

Line No. 0130 203200 Class C	Increase 28,218 c.y.
Line No. 0220 3049905 Misc. Placing 8" rock base	Increase 4"

E) A description of any previous use or submission of the same proposal by the contractor:

We proposed 18" prior; we believe 12" gives the State less risk.

Additional Comments:

**** Portion Below This Line To Be Filled Out by MoDOT ****

Comments: I RECOMMEND APPROVAL OF THIS V.E. CONCEPT. SHOULD THIS CONCEPT BE APPROVED AT ALL LEVELS THE CONTRACTOR SHOULD SUBMIT MORE DETAILED INFORMATION SUCH AS: ANY PROFILE GRADE CHANGES SHOULD MEET MODOT DESIGN CRITERIA, ANY ADDITIONAL WASTE NEEDS TO BE ACCOUNTED FOR, AND BORROW AREAS IDENTIFIED.

Michael K. O'Malley

Submitted By Resident Engineer

5/27/08

Date

Comments: Agree w/ the above and that this concept has merit. Rock base placed @ 12" should be in accordance w/ std spec 303 as appropriate for 12" thickness. Concept as proposed will also require a utility adjustment (telephone/water) estimated @ \$25-30K. In lieu of lowering profile as proposed, an alternative to obtaining add'l class C would be to cut the slopes back further to the right of approx. sta's 1220-1227 providing add'l excavated rock. Excess class A material from this area could be placed via add'l compacting embankment in the adjacent section of approx. sta's 1228-1232 for the future Rte 5 4 lane. This will not entail modifying the profile and may provide a more viable option, which should be considered.

☒ Approval
Recommended

☐ Rejection
Recommended

Roger Schwartz

District Engineer

5/29/08

Date

Comments: The concept is approved. However prior to finalizing the VE proposal, the alternative proposal stated above, ⁱⁿ the District Engineer's comments should be further investigated by taking cores to the right of the location to determine if suitable rock is available. If rock is available, the alternative proposal is the most desirable since it will not require modifying the plan profile nor relocation of existing utilities.

☒ Approval

☐ Rejection

OSM for Dave Ahlvers

State Operations Engineer

5/13/08

Date

Distribution:

Resident Engineer, District Operations Engineer, State Operations Engineer

*Value Engineering Administrator - *MoDOT, P.O. Box 270, Jefferson City, MO 65102




MEMORANDUM

Missouri Department of Transportation
Project Operations-Construction
District 5

TO: Pat McDaniel
Technical Support Engineer

CC: Mike O'Malley

FROM: Duane Kliethermes 
District Final Plans Processor

DATE: May 30, 2008

SUBJECT: District 5
V.E. Proposal
Job No. J5P0592A
Contract I.D. 080328-501
Route 54, Camden County

Attached is a value engineering proposal submitted by Dave Kolb Grading on the above mentioned project.

The contractor proposes to increase the rock base from 8" to 12" providing a longer life and less maintenace.

We concur with our Resident Engineer and recommend this proposal be approved.

The potential savings involved are covered in the attachments

cc: File

VALUE ENGINEERING CHECK SHEET

TYPE OF WORK

(Check one that applies)

- ☐ Bridge/Structure/Footings
- ☐ Drainage Structures (RCP, RCB, CMP's ect)
- ☐ TCP/MOT
- ☐ Paving (PCCP, ect.)
- ☒ Grading/MSE Walls
- ☐ Signal/Lighting/ITS
- ☐ Misc. _____

SUMMARY OF PROPOSAL

(If needed, condense summary to a couple of lines)

• Increase the rock base from 8" to 12" by excavating deeper (i.e. change plan profile) or excavating additional rock adjacent to the roadway bed.

SCANNING OF DOCUMENT

If the proposal is large, please mark or make note, which pages need to be scanned into the database. If there are special instructions, make note of them here.

All